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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/564,228

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Joachim Teller

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EXAMINER

KOSLOW, CAROL M

ART UNIT

PAPER NUMBER

1793

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PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	<b>Application No.</b> 10/564,228	<b>Applicant(s)</b> TELLER ET AL.	
	<b>Examiner</b> C. Melissa Koslow	<b>Art Unit</b> 1793	

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --**

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 15-28 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 15-28 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
  3. ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)            | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)   | Paper No(s)/Mail Date. ____.                                      |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date <u>1/10/06</u> .   | 6) <input type="checkbox"/> Other: ____.                          |

The citation of EP 272071 on page 4 in the specification is not a proper information disclosure statement. 37 CFR 1.98(b) requires a list of all patents, publications, or other information submitted for consideration by the Office, and MPEP § 609.04(a) states, "the list may not be incorporated into the specification but must be submitted in a separate paper." Therefore, unless the reference has been cited by the examiner on form PTO-892, it has not been considered.

The German language references cited in the information disclosure statement of 10 January 2006 have been considered with respect to the relevancy given in the specification and the provided English abstracts.

The substitute specification filed 10 January 2006 has been entered because it conforms to 37 CFR 1.125(b) and (c).

The disclosure is objected to because of the following informalities: On page 7, "Zn<sup>2+</sup>" should be "Zn<sup>2+</sup>." Page 9 refers to figures 1 and 2, but there are no figures for the present application. It is noted that the German and PCT priority documents have figures as part of the specification, but these figures were not filed with the application papers submitted 10 January 2006 for this application. Finally, there is no brief description of figures 1 and 2 as required by 37 CFR 1.74. See MPEP § 608.01(f). Appropriate correction is required.

Figures 1 and 2, in compliance with 37 CFR 1.121(d), are required in this application because they are missing. The corrected drawings are required in reply to the Office action to avoid abandonment of the application. The requirement for corrected drawings will not be held in abeyance.

The specification is objected to as failing to provide proper antecedent basis for the claimed subject matter. See 37 CFR 1.75(d)(1) and MPEP § 608.01(o). Correction of the following is required:

The subject matter of claims 17 and 18 are not found in the specification. It is noted that the subject matter for claim 17 is found in original claim 3 and this teaching implicitly discloses the subject matter of claim 18. Thus, while the subject matter of claims 17 and 18 are part of the originally filed subject matter, they do not find antecedent basis in the specification. .

Claims 15, 26 and 28 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention.

Claim 15 teaches "at least one metal oxide". The specification, the original claims and the PCT teach a metal oxide and teaches they are primarily iron oxides, mixed phases of iron oxide or iron oxides that contain divalent or trivalent ions, which reads upon ferrites or doped iron oxides. The claimed composition of at least one metal oxide is different from and is not supported by the teachings in the specification, the original claims and the PCT since it allows for any combination of metal oxides as long as the combination is magnetic. Thus there is a discrepancy between the claimed composition and that disclosed in the specification, the original claims and the PCT. While in U.S. patent practice, "a" has the legal definition of "one or more"; "a" when used in European patent application does not necessarily have this legal interpretation. One would have to read to PCT application to determine the meaning of "a" and it is clear from

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the specification that "a metal oxide" does not refer to a mixture of metal oxides, as claimed in claim 5.

Claim 15 teaches producing the nanoparticles by high pressure homogenization of the metal oxide and the polymer in an aqueous medium having a pH greater than 7 and claim 28 teaches this medium comprises a solution of ammonia in water. The specification, original claims 10-14 and the PCT teach the producing the nanoparticles by high pressure homogenization of the particles and polymer in an aqueous medium and that if the metal oxide is produced in situ then the aqueous medium is alkaline, or in other words, that the medium has a pH greater than 7, such as a solution of ammonia in water. Thus there is a discrepancy between the process of claims 15 and 28 and that in the specification, the original claims and the PCT. It is noted that the teachings in the specification, PCT and original claims 10-14 support the process of claim 27.

The specification teaches on page 8, that the high pressure is in the range of 500-1200 bar. Claim 26 teaches the pressure is in the range of 500 bar and greater. The claims range includes values outside that of the specification. This discrepancy between the claimed range and the range in the specification needs to be corrected.

The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. A nonstatutory obviousness-type double patenting rejection is appropriate where the conflicting claims are not identical, but at least one examined application claim is not patentably distinct from the reference claim(s) because the examined application claim is either anticipated by, or would have been obvious over, the reference claim(s). See, e.g., *In re Berg*, 140 F.3d 1428, 46 USPQ2d 1226 (Fed. Cir. 1998); *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) or 1.321(d) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent either is shown to be commonly owned with this application, or claims an invention made as a result of activities undertaken within the scope of a joint research agreement.

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

Claims 15-28 are provisionally rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 1-44 of copending Application No. 10/888,189. Although the conflicting claims are not identical, they are not patentably distinct from each other because the process claimed in the copending application would produce the particles claimed in this application and the particle of claims 29-44 of the copending application read upon the particles of claims 15 and 19-28 of this application and therefore would have the properties of claims 16-18 of this application. the claims in this application are product-by-process claims and the process limitations of claims 15 and 26-28 does not patentably distinguish the particles claimed in this application from the particles claimed in the copending application. Even though product-by-process claims are limited by and defined by the process, determination of patentability is based on the product itself. The patentability of a product does not depend on its method of production. If the product in the product-by-process claim is the same as or obvious from a product of the prior art, the claim is unpatentable even though the prior product was made by a different process. *In re Thorpe*, 777 F.2d 695, 698, 227 USPQ 964, 966 (Fed. Cir. 1985).

This is a provisional obviousness-type double patenting rejection because the conflicting claims have not in fact been patented.

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U.S. patents 5,034,145 and 4,501,726 are cited as of interest since that teach magnetic nanoparticles comprising a polymer and a metal oxide which are produced using high pressure homogenization and having a particle size range that overlap the claimed size range, but the amount of metal in these taught nanoparticle is less than 50 mass%.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Melissa Koslow whose telephone number is (571) 272-1371. The examiner can normally be reached on Monday-Friday from 8:00 AM to 3:30 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jerry Lorengo, can be reached at (571) 272-1233.

The fax number for all official communications is (571) 273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/cmk/  
March 1, 2008

/C. Melissa Koslow/  
Primary Examiner  
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